

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

Order Instituting Investigation into implementation of Assembly Bill 970 regarding the identification of electric transmission and distribution constraints, actions to resolve those constraints, and related matters affecting the reliability of electric supply.

Investigation 00-11-001  
(Filed November 2, 2000)

**ADMINISTRATIVE LAW JUDGE'S RULING AND NOTICE  
OF EVIDENTIARY HEARINGS  
ON TEHACHAPI TRANSMISSION PROJECT**

This ruling establishes the procedural schedule in this proceeding for Phase 5 (Generic Methodology) and Phase 6 (Evaluation of Tehachapi Transmission Project) during the next few months, per my direction at the January 14, 2003 prehearing conference (PHC). I also direct respondents, Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE) and San Diego Gas & Electric Company (SDG&E), collectively referred to as "the utilities," to initiate an expeditious process whereby developers of renewable resources can obtain meaningful cost estimates for potential transmission upgrades that would be needed to access these resources. The cost information will be included in the Commission's renewables transmission plan report, due to the Legislature by December 1, 2003, pursuant to Senate Bill (SB) 1038.

By subsequent ruling, I will address the process and schedule for the Commission's development of the SB 1038 renewables transmission plan.

## **1. Development of Generic Economic Methodology (Phase 5)**

The London Economics report on a generic methodology for the economic evaluation of transmission projects has been delayed, for reasons discussed by the California Independent System Operator (ISO) at the PHC. The report is now expected to be filed in this proceeding by the end of February 2003. However, the ISO reports that the model used to help refine the methodology (POOLMOD) is not sophisticated enough to use for an economic assessment of a specific transmission project (e.g., Path 26) as originally planned. There was also some discussion at the PHC as to whether Path 26 should still be the candidate for evaluation using the proposed methodology, or whether the methodology should be applied to another project that may be higher priority. Some suggested that we have evidentiary hearings on the London Economics report without a specific application, and let interested parties debate the methodology with alternate approaches and applications of their choice.

As I discussed at the PHC, I am unwilling to move forward with evidentiary hearings on a generic methodology unless the Commission and interested parties can evaluate its application to a specific transmission project at the same time. Generic methodological concepts are simply too difficult to assess in isolation, or to compare with alternative methods. One needs to have an agreed upon application (project assessment) with which to consider the reasonableness of the proposed methodology. The project assessment needs to utilize a common set of assumptions concerning project characteristics, common modeling algorithms (such that differences in results can be isolated to differences in evaluation methods, not the way in which the model simulates the transmission or generation system), and the same input assumptions for prices, transmission line characteristics, plant production capacity, heat rates, electric loads, etc. Then, one can apply the proposed method (and alternative methods)

to the project assessment, see the difference in results due exclusively to methodology differences, and examine whether the results make conceptual sense.

Per my ruling at the PHC, we will proceed with Phase 5 as follows: After the London Economics report is issued at the end of February, PG&E will organize a workshop among interested parties to discuss the options for applying the proposed methodology to a specific project (i.e., what model to use and what project), with the goal of holding evidentiary hearings on generic methodology issues in early August, 2003. PG&E should serve all appearances and the state service list in this proceeding with a notice of the workshop at least four working days before the workshop date.

One option is to apply the methodology to a high priority project that should be evaluated for economic need in the near future. I still think that Path 26 is a good candidate, particularly since we have consistent data from the London Economics study on that project. However, there may be other transmission projects that parties can identify at the workshop. The second option is to apply the generic methodology to a project that has already been evaluated for economic need, e.g., Miguel-Mission, for which the input assumptions and project description have already been developed in great detail, and the model requires no substantial (if any) development. This latter approach would allow the Commission to test a proposed methodology using a consistent base case application. It would not represent a new economic assessment of the project.

After the workshop, the ISO, utilities and interested parties should file comments on their recommended approach to applying the generic economic methodology, consistent with the direction given above. The schedule is linked to the filing of the London Economics Study, as follows:

ISO files London Economics Study	Day 1 (expected: February 28, 2003)
PG&E holds workshop	by Day 15 (expected: March 14, 2003)
Comments due	Day 26 (expected: March 25, 2003)

The recommendations should present procedural and scheduling options for the Commission, and include one option that would allow the Commission to hold evidentiary hearings on Phase 5 by early August 2003.

## **2. Tehachapi Transmission Project (Phase 6)**

SCE has completed the conceptual studies funded by interested wind developers in the Tehachapi region. These studies have identified the substations and lines that would be required (and their locations) to meet the potential growth of wind resources in that region. Apparently, there are 230kV and 66kV lines that will be needed for this project.<sup>1</sup> As discussed at the PHC, concurrent testimony will address the project's network benefits, contribution to the goals of the Renewables Portfolio Standard (RPS) program, project costs, as well as ratemaking issues.<sup>2</sup>

The schedule is as follows:

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<sup>1</sup> See SCE's monthly status report, filed on December 23, 2002 in this proceeding, pp. 2-3.

<sup>2</sup> The RPS program was established by SB 1078 (stats 2002, chapter 516), which was signed into law on September 12, 2002.

Concurrent Opening Testimony	April 1, 2003
Concurrent Rebuttal Testimony	April 21, 2003
List of Exhibits, Cross-Examination Estimates, Witness Availability <sup>3</sup> and Last Day to Submit Motions to Strike and Discovery Requests	April 30, 2003
Replies to Motions to Strike Due	May 7, 2003
Evidentiary Hearings	May 12-16, 2003

Evidentiary hearings will begin on Monday, May 12, 2003 at 10:00 a.m. For the rest of the week, hearings will begin at 9:00 a.m. and my intent is to end each of those hearing days at 1:00 p.m., without a lunch break. However, if we can reduce the total number of days of hearings by extending the day until 3:30 p.m. (with a lunch break), I may do so.

All discovery disputes should be directed to the Commission's Law and Motion Judge. I plan to rule on motions to strike on the first day of hearings, based on the written filings. There will be no opportunity for oral argument.

During the PHC, there was also discussion of when SCE would file a Certificate of Public Convenience and Necessity (CPCN) for the Tehachapi transmission project. SCE anticipates that it will start the detailed environmental studies in mid-March to capture the spring period, and then file the CPCN after a full year of study by around February 1, 2004. Representatives of the wind developers in the region urged the Commission to set an earlier target date for the CPCN of November 1, 2003. Based on the informal discussions they had with

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<sup>3</sup> See Attachment.

SCE during the development of the conceptual studies, they believe that SCE would be in a position to file late this year.

I directed SCE to file, by February 3, 2003, a schedule that outlines the minimum amount of time required to file their CPCN, with a detailed description of what factors are driving that schedule. Interested parties may respond by February 7, 2003.<sup>4</sup>

### **3. Other Regional Transmission Projects and Cost Studies**

Prior to the PHC, Coral Power L.L.C. (Coral Power) submitted a written statement that identified a transmission project for review by the Commission. The project would involve construction of a 500 kV transmission line from the Imperial Valley substation to the Devers substation.<sup>5</sup> Coral Power argues that this project is needed to access the generation in Mexico, the generation coming on line at Palo Verde and the geothermal resources within the Imperial Valley. Coral Power contends that there are line limitations on the Southwest Power Link (SWPL) from Imperial Valley to Miguel, that significantly constrain the flow of power coming into SCE's service territory. In addition, Coral Power states that the project could relieve some of the load constraints in the Palm Springs/Indian Wells area on the Imperial Irrigation District system.<sup>6</sup>

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<sup>4</sup> RT at 428-432.

<sup>5</sup> The Imperial Valley substation is owned by SDG&E, but located within the Imperial Irrigation District's service territory. (See RT at 378.) The Devers substation is on SCE's system.

<sup>6</sup> In response to my questions at the PHC, Coral Power explains that the economic benefits of the Imperial Valley-Devers 500 kV line assumes that the Miguel-Mission/Imperial Valley substation upgrades are in place, because, according to Coral Power, these upgrades are needed to fully maximize the economic benefits of the new 500 kV line. However, the economic evaluation of the Miguel-Mission/Imperial Valley

*Footnote continued on next page*

Six additional regional transmission projects were suggested by Vulcan Power Company (Vulcan Power) in their PHC, filed on January 20, 2002 with my approval.<sup>7</sup> Table 1 presents an overview of the project descriptions. Five of the projects address transmission upgrades to access baseload geothermal resources. The sixth project, named “The Southwest Clean Power Link,” is presented as a potential alternative to other proposals for upgrading SWPL, such as the Imperial Valley-Devers project proposed by Coral Power or an additional Devers-Palo Verde line. This project would involve a new 500 kV line constructed along existing right of ways from the Southwest into the Los Angeles basin. Vulcan Power envisions that it will carry a blended product to California consisting of approximately 800 megawatts (MW) of gas-fired power under long-term contracts, and 240 MW of baseload renewables with a small amount of intermittent wind power resources. Vulcan Power reports that it is planning a preliminary concept decision by participants on this line over the next several months.

Based on the PHC discussion, I do not believe that evidentiary hearings would be a productive forum for evaluating these projects at this time. As Coral Power and Vulcan Power acknowledge, the first step to any meaningful consideration of these projects—either in an evidentiary forum or in the bidding forum established by SB 1078—is to develop reliable cost estimates for them. We will start there, by directing the utilities to move forward without delay in responding to developers’ requests for conceptual studies (including cost

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upgrades in this proceeding was conducted on a stand-alone basis, i.e., without any presumption of upgrades to the Southwest Power Link. See RT at 375-376.

<sup>7</sup> RT at 397. PG&E filed a response to Vulcan Power’s post-PHC statement on January 27, 2003.

estimates) for these and other transmission projects involving access to renewable resources. Relevant information from these studies should be included in the transmission planning report that the Commission is required to submit to the Legislature by December 1, 2003, per SB 1038. SCE should meet without delay with Coral Power to discuss initiating a study process among interested project developers for the Imperial Valley-Devers project, similar to the process whereby the Tehachapi study was developed and funded. For the same purpose, the utilities should meet with Vulcan Power to discuss the development of cost studies for the five base-load geothermal projects discussed in its PHC statement. In addition, as SCE suggested at the PHC, the utilities should issue a general solicitation letter to industry participants, including the service list in this proceeding, within ten (10) working days from the date of this ruling. The utilities may jointly issue a solicitation, or separately—but they should consult to ensure that the letter is similar in format. The purpose of the solicitation letter is to afford developers the opportunity to fund transmission conceptual (including cost) studies for projects that they are interested in developing to address the renewables goals set forth in SB 1078.<sup>8</sup>

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<sup>8</sup> In its response to Vulcan Power's PHC statement, PG&E asserts that "transmission investments should not be made to further the RPS program unless and until a project is a winning bidder in accordance with the Commission's ranking criteria." (Response, p. 8.) At the same time, PG&E acknowledges that the rank ordering and selection of winning bidders under the RPS program must "consider estimates of indirect costs associated with needed transmission investments," per the statute language. (*Ibid.*, p. 1.) Nonetheless, PG&E's comments ignore the obvious "Catch-22" discussed at some length at the PHC, namely, that renewable resource developers cannot effectively participate in the RPS program unless they have reliable estimates of these indirect costs. Therefore, I believe it is not premature to direct utilities to move forward without delay in soliciting interest for studies that will produce those estimates, even though we will not know the results of the bidding program until a future time.



In light of Legislative mandates of SB 1038 and SB 1078, the utilities will need to devote considerable resources to conducting conceptual and cost studies for transmission plans that involve renewable resources, and they should begin immediately to acquire the staff or consulting resources needed for this effort so that the studies can be completed within an accelerated time frame. However, the utilities can only proceed with these studies once project developers have met with them, have agreed on a scope of study and schedule, and have allocated the costs of the study among the various project developers. Hence, the responsibility for moving forward expeditiously with these studies is clearly shared. With the exception of the Tehachapi project, I will not schedule additional evidentiary hearings over the next few months so that the utilities and industry participants can focus resources on the effort of developing project cost information as a high priority task in this proceeding.

In their monthly status reports, the utilities should describe the results of their meetings with Coral Power and Vulcan Power (as appropriate) and describe the responses to their general solicitation of interest. The description should include the renewable resource projects and sizes under discussion with developers, location of proposed projects and potential transmission upgrades, and schedule for study completion. I anticipate that the California Energy Commission (CEC) will find this information useful for its assessment of renewable resource potential, as part of its separate SB 1038 report to the Legislature, as well as for the handoff of information to this Commission (see below).

#### **4. Renewables Transmission Plan, Per SB 1038**

As discussed in my January 1, 2003 ruling, and reiterated at the PHC, there needs to be an orderly “handoff “from the CEC to this Commission of renewable resource assessment results, so that the Commission can develop the renewable

transmission study required by SB 1038. As part of their coordination efforts to address Legislative mandates, the Commission and CEC staff have scheduled a handoff of the draft assessment results by July 1, 2003.

With that document, the utilities can further refine their transmission plans to reflect the reporting requirements of SB 1038. However, as I indicated at the PHC, interested parties and industry stakeholders should have an opportunity to provide the utilities with input into these plans *before* the utilities submit their renewables transmission plans to the Commission for review. At my request, the ISO submitted a letter outlining how the ISO's grid planning process could provide that forum by hosting an additional stakeholders meeting in July, after the CEC's draft assessment is released.<sup>9</sup> I am still considering that proposal, as well as other procedural options for obtaining public input prior to the utilities' submission of transmission plans to this Commission. I am also awaiting the CEC's description of the scope of the draft resource assessment that it will file on July 1, 2003. By subsequent ruling, I will address the process and schedule for the Commission's development of the SB 1038 transmission plan report.

Finally, as I indicated at the PHC, the framework and scope of the Commission's renewables transmission plan needs to be developed at the outset of this process.<sup>10</sup> I have directed Energy Division to meet with the utilities over the next two weeks to discuss a framework and scope of work for my consideration. The utilities should work cooperatively with Energy Division in this effort. My subsequent ruling will present a study scope of work, based on

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<sup>9</sup> See January 24, 2003 letter from ISO filed in this proceeding.

<sup>10</sup> See RT at 386-389.

Energy Division's recommendations, and interested parties will have an opportunity to comment.

**IT IS RULED** that:

1. The development of a generic economic assessment methodology for transmission projects (Phase 5) shall proceed as follows:

London Economics Study filed	Day 1 (expected: February 28, 2003)
PG&E holds workshop	by Day 15 (expected: March 14, 2003)
Comments due	Day 26 (expected: March 25, 2003)

As discussed in this ruling, Pacific Gas and Electric Company (PG&E) shall organize a workshop among interested parties to discuss the options for applying the London Economics study methodology to a specific project (i.e., what model to use and what project), and shall serve all appearances and the state service list in this proceeding with a notice of the workshop at least four working days before the workshop date. The comments should present procedural and scheduling options for the Commission's consideration, including one option that would allow the Commission to hold evidentiary hearings on Phase 5 by early August 2003.

2. The schedule for the evaluation of the Tehachapi Transmission Project (Phase 6) is as follows:

Concurrent Opening Testimony	April 1, 2003
Concurrent Rebuttal Testimony	April 21, 2003
List of Exhibits, Cross Estimates and Witness Availability; Last Day to Submit Motions to Strike and Discovery Requests	April 30, 2003
Replies to Motions to Strike Due	May 7, 2003
Evidentiary Hearings	May 12-16, 2003

Evidentiary hearings will be held at the Commission's Courtroom, 505 Van Ness Avenue, San Francisco, California and begin on Monday, May 12, 2003 at 10 a.m. As discussed in this ruling, for the rest of the week, hearings will begin at 9 a.m. and end at 1 p.m., without a lunch break, unless extending the hours can eliminate the need for an additional day of hearings.

3. By February 3, 2003, Southern California Edison Company shall file a schedule that outlines the minimum amount of time required to file its Certificate of Public Convenience and Necessity for the Tehachapi Transmission Project, with a detailed description of what factors are driving that schedule. Interested parties may respond by February 7, 2003.

4. As discussed in this ruling, the utilities shall move forward without delay to develop cost estimates for renewable resource transmission projects, and report their progress in the transmission monthly status reports. Within 10 working days from the date of this ruling, the utilities shall issue a general solicitation letter to industry participants, including the service list in this proceeding. The purpose of the letter shall be to afford developers the opportunity to request and fund transmission conceptual studies, including project cost estimates, for projects that they are interested in developing to address the renewables goals set forth in Senate Bill (SB) 1078.

5. The process and schedule for the Commission's development of the SB 1038 transmission plan report will be addressed by subsequent ruling. The utilities shall work cooperatively with Energy Division to develop a proposed scope of work for the Commission's SB 1038 renewables transmission plan, as discussed in this ruling.

6. All testimony and filings in this proceeding shall be served on the appearances and state service list by both electronic and US mail by the due date, unless otherwise indicated by ruling. Electronic versions of filings should be

served by 6 p.m. on the date they are required to be filed. Parties are not obligated to adopt special procedures for serving e-mail addresses that do not work or are not provided on the service list. Although testimony and exhibits are not filed in the Commission's Docket Office, I encourage parties to distribute those documents electronically as close as possible to the time they are placed in the mail. Before filing pleadings or testimony in this proceeding, parties should make sure to obtain the most recent service list from the Commission's Process Office (and posted on the Commission's website). Electronic mail should be sent to me at meg@cpuc.ca.gov. Additional procedures for serving testimony and preparing exhibits are presented in the Attachment.

Dated January 29, 2003, at San Francisco, California.

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/s/ Angela K. Minkin for  
Meg Gottstein  
Administrative Law Judge

**TABLE 1: Regional Projects Proposed By Vulcan Power Company**

<b>California New Renewables Transmission Projects</b>					
Transmission Project Name	Estimated Trans Size	Likely CA Purchasers	Renewable Project Name	Power Type	Est. New Output
1. Bishop/Control Upgrade	230 kV	SCE SDG&E LADWP	Box Canyon Mammoth California	Geo Baseload	120 MW
Same as 1. Above		SCE	Nevada Geo (Multi Site)	Geo Baseload	60 MW
2. Weed Upgrade	230 kV	PG&E	Military Pass California	Geo Baseload	240 MW
3. Surprise Upgrade	115 kV	PG&E	Surprise Valley Warner Range California	Geo Baseload Biomass Baseload Wind Intermittent	60 MW 60 MW 200 MW
4. PDCI Green Intertie	500 MW Intertie	SCE LADWP SDG&E Northwest	Nevada Geo (Multi Site)	Geo Baseload	500 MW
5. COB Green Power Priority Use Order	240 MW	PG&E SCE LADWP	Newberry Volcano Oregon	Geo Baseload	240 MW
6. Southwest Clean Power Link	500 kV	SCE SDG&E LADWP APS, NPC	Southwest Clean Power (Multi Site)	Geo Baseload Biomass Baseload Wind Intermittent Gas, Blended	120 MW 120 MW 200 MW 880 MW

**(END OF TABLE 1)**

## **Attachment**

### **PROCEDURES FOR SERVING TESTIMONY AND PREPARING EXHIBITS**

#### **1. Service of Exhibits**

All prepared written testimony should be served via US mail and electronically on all appearances and state service on the service list, as well as on the Assigned Commissioner's office and on the Assigned ALJ. Parties are not obligated to adopt special procedures for serving e-mail addresses that do not work or are not provided on the service list. Parties should serve testimony electronically as close as possible to the time that the testimony is placed in the mail.

Prepared written testimony should NOT be filed with the Commission's Docket Office.

**One** copy of prepared written testimony should be sent to the Assigned ALJ electronically at meg@cpuc.ca.gov and a hard copy should also be sent to each of the following locations:

- 1) ALJ Meg Gottstein  
CPUC, Room 5044  
505 Van Ness Avenue  
San Francisco, CA 94102
- 2) ALJ Meg Gottstein  
PO Box 210  
Volcano, CA 95689-0210  
(for overnight delivery **only**: 21496 National Street, Volcano, CA 95689)

#### **2. Identification of Exhibits in the Hearing Room**

Each party sponsoring an exhibit should, in the hearing room, provide **one copy to the ALJ and one to the court reporter**, and have sufficient copies available for distribution to parties present in the hearing room. Exhibits shall comply with Rule 70 of the Commission's Rules of Practice and Procedure. **The upper right hand corner of the exhibit cover sheet should be blank for the ALJ's exhibit stamp.** Please note that this directive applies to cross-examination exhibits as well. If there is not sufficient room in the upper right hand corner for an exhibit stamp, please prepare a cover sheet for the cross-examination exhibit.

### **3. Cross-examination With Exhibits**

Any exhibit to be used for cross-examination purposes should be served in advance on counsel for the party to be cross-examined, or at worse, served on the day of hearings before they commence (service may need to be made electronically, by overnight mail or facsimile). This cuts the amount of hearing time spent on foundational matters. While some potential cross-examination exhibits may only come to the parties' attention after the hearing has started, and short notice may be necessary in some instances, the parties are strongly encouraged to cooperate in observing this suggested procedure and not to use "surprise" as a litigation strategy.

- 4.** Each party should provide the following information via US mail and electronic delivery to the assigned ALJ at the addresses listed above **no later than five (5) working days (or otherwise scheduled by ALJ ruling)** prior to the start of evidentiary hearings:
  - a. A list of exhibits that it intends to offer, in the approximate order they wish to have them introduced. The list should include the name of the witness and the subject or title of the document.
  - b. An estimate of direct and cross-examination time that the party needs, broken down by party and by witness.
  - c. A list of any schedule constraints affecting any of its witnesses.

Copies of this information should also be sent electronically to all appearances and the state service list in this proceeding. Service by US mail is optional.

### **5. Corrections to Exhibits**

Generally, corrections to an exhibit should be made in advance and not orally from the witness stand. Corrections should be made in a timely manner by providing new exhibit pages on which corrections appear. The original text to be deleted should be lined out with the substitute or added text shown above or inserted. Each correction page should be marked with the word "revised" and the revision date.

Exhibit corrections will receive the same number as the original exhibit plus a letter to identify the correction. Corrections of exhibits with multiple sponsors will also be identified by chapter number. For example, Exhibit 5-3-B is the second correction made to Chapter 3 of Exhibit 5.

**(END OF ATTACHMENT)**



**CERTIFICATE OF SERVICE**

I certify that I have by mail, and by electronic mail, to the parties to which an electronic mail address has been provided, this day served a true copy of the original attached Administrative Law Judge's Ruling and Notice of Evidentiary Hearings on Tehachapi Transmission Project on all parties of record in this proceeding or their attorneys of record.

Dated January 29, 2003, at San Francisco, California.

/s/ KE HUANG

Ke Huang

**N O T I C E**

Parties should notify the Process Office, Public Utilities Commission, 505 Van Ness Avenue, Room 2000, San Francisco, CA 94102, of any change of address to ensure that they continue to receive documents. You must indicate the proceeding number on the service list on which your name appears.

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The Commission's policy is to schedule hearings (meetings, workshops, etc.) in locations that are accessible to people with disabilities. To verify that a particular location is accessible, call: Calendar Clerk (415) 703-1203.

If specialized accommodations for the disabled are needed, e.g., sign language interpreters, those making the arrangements must call the Public Advisor at (415) 703-2074, TTY 1-866-836-7825 or (415) 703-5282 at least three working days in advance of the event.